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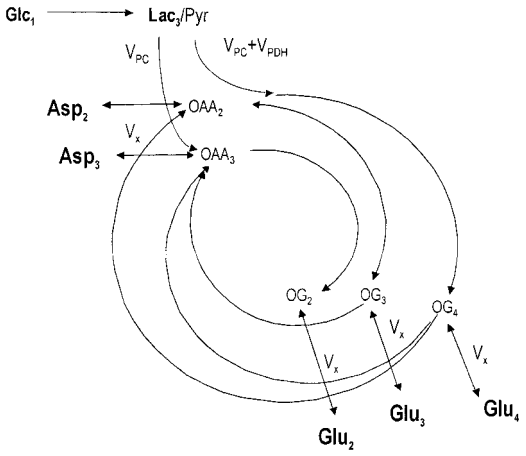
Pages E100–E112: Rolf Gruetter, Elizabeth R. Seaquist, and Kamil Ugurbil. "A mathematical model of compartmentalized neurotransmitter metabolism in the human brain." In the interest of clarity, we wish to correct a number of errors.

Correction 1: On page E102, Figure 1*B* was missing an arrow pointing from OG_3 to OAA_2. The corrected Fig. 1*B* follows



The bidirectional arrow between OG_3 and OAA_2 was mentioned in the caption, but a clearer statement should have read, "Label coming from OG C3 is randomized at the succinate level (similar to the label from OG C4). Hence label transfer from OG C3 to OAA C2 is taken into account by the bidirectional arrow between OG C3 and OAA C2."

Correction 2: On page E105, *Eqs. 18* and *19* should be replaced with

$$\frac{d^{13}Glu_4^{(g)}}{dt} = (V_x + V_{PC})\frac{^{13}OG_4^{(g)}(t)}{OG^{(g)}} - (V_x + V_{syn})\frac{^{13}Glu_4^{(g)}(t)}{Glu^{(g)}} + V_{gase}\frac{^{13}Gln_4^{(g)}(t)}{Gln^{(g)}} + V_{NT}^{app}\frac{^{13}Glu_4^{(n)}(t)}{Glu^{(n)}} \quad (18)$$

$$\frac{d^{13}OAA_2^{(g)}}{dt} = \frac{V_g}{2}\frac{^{13}OG_4^{(g)}(t) + {}^{13}OG_3^{(g)}(t)}{OG^{(g)}} - (V_g + V_{PC})\frac{^{13}OAA_2^{(g)}(t)}{OAA^{(g)}} \quad (19)$$

The actual programming used in obtaining the results was based on the correct expressions.

Correction 3: On page E108 (second column, line 24), the calculation of ATP fluxes was incorrect. The glial oxidative ATP synthesis should be $V_g \times 14.5 + V_{PC} \times 9.5$. With this assumption, the ATP synthesis in the glial compartment (lines 28 and 29) calculates to 2.3 $\mu mol \cdot g^{-1} \cdot min^{-1}$. Likewise, the calculation of neuronal ATP production (paragraph 2, line 3) should have been $14.5 \times V_{PDH,}$ which amounts to a neuronal ATP synthesis of 8.3 $\mu mol \cdot g^{-1} \cdot min^{-1}$. The findings, specifically the importance of glial metabolism relative to neurons, are unaffected by these errors.

Correction 4: On page E110 (column 1, lines 11 and 7 from the bottom), it should read $Glu^{(n)} = (1 - \alpha)\ Glu_{tot}$ and $Gln^{(g)} = (1 - \beta)\ Gln_{tot}$, respectively; accordingly, the footnote to Table 6 on E109 should read $Gln^{(g)} = (1 - \beta)Gln_{tot}$.

We regret any confusion these errors may have created. No findings or conclusions of the paper are affected.